

**Consider**

TM

# **Fingermath**



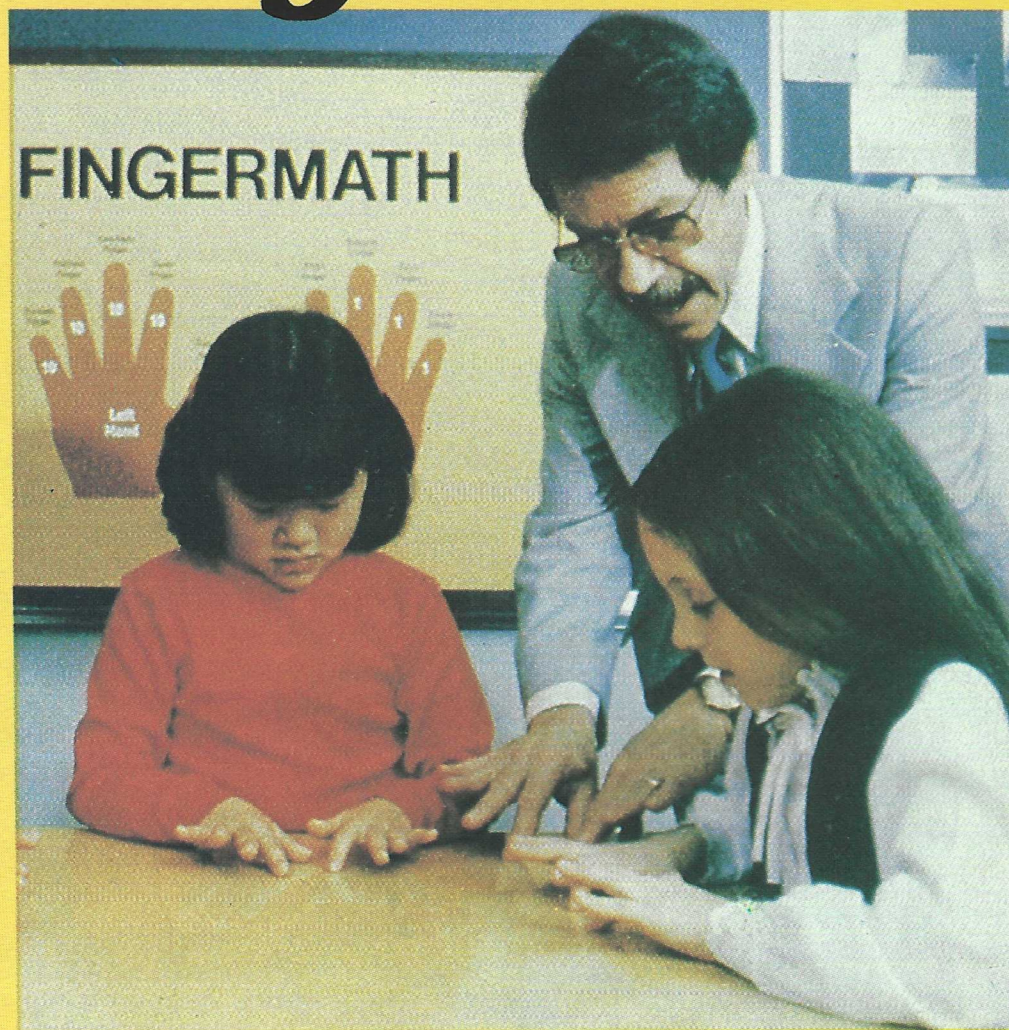
**THE REMARKABLE NEW LEARNING SYSTEM  
THAT MAKES EVERY FINGER COUNT.**

- Solves Math Motivation Problems
- Teaches Computation With Whole Numbers
- Improves Comprehension





# Break through the learning barrier with **Fingermath**.



- Easy to teach—easy to learn.
- Supplements any basal math curriculum.
- Simple...accurate...scientific.
- So fascinating, kids can't wait to get their hands on it.

Fingermath takes the boredom and fear of failure out of elementary mathematics. It's a unique method that uses the hands to perform the 4 basic operations of arithmetic.

Fingermath turns arithmetic into an exciting game kids love to play. Using only their 10 fingers, your pupils can learn to do simple calculations quickly and accurately—without rote memorization. In fact, Fingermath teaches them to use their hands as a calculator.

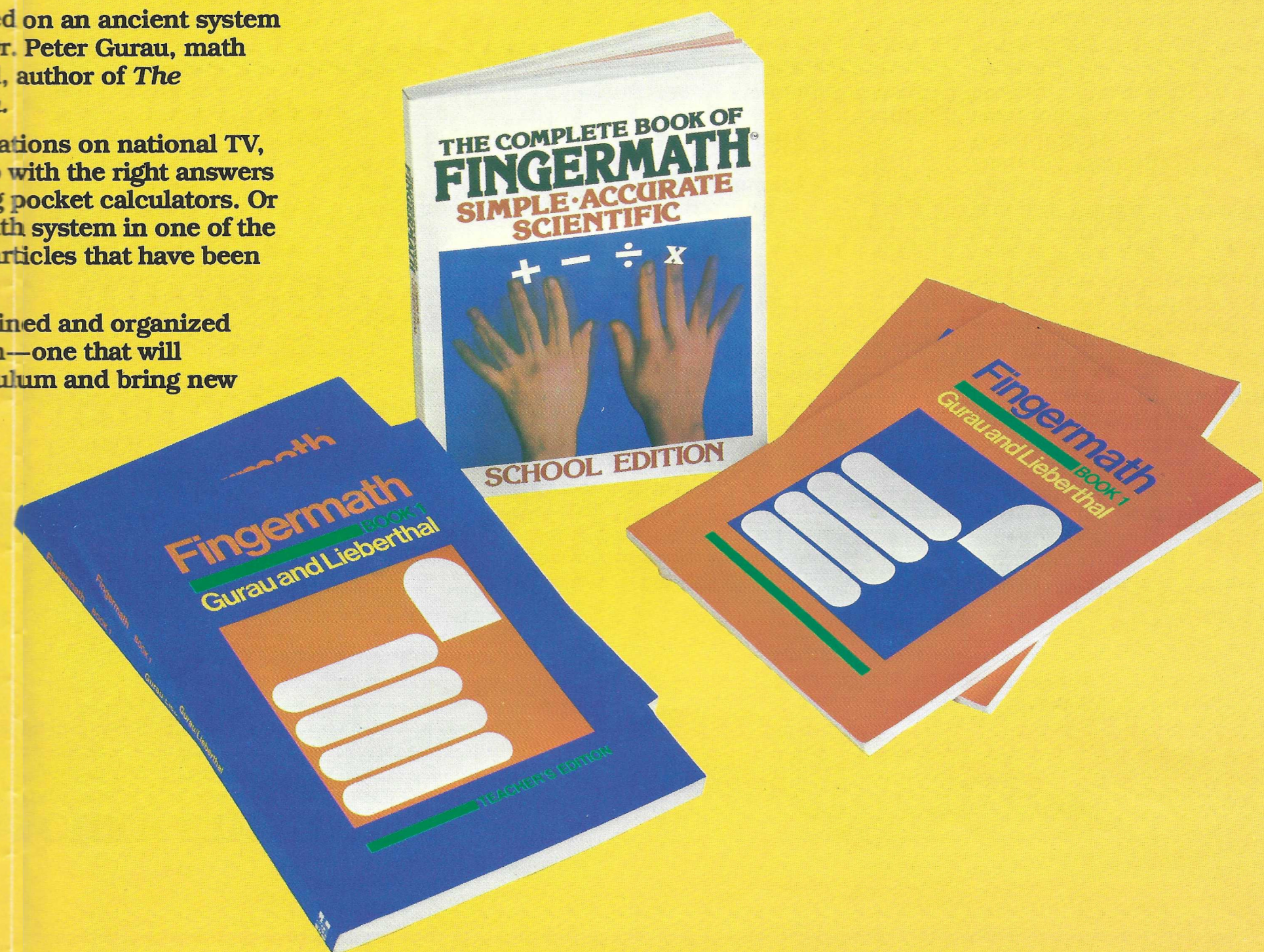
The simple techniques are based on an ancient system adapted for classroom use by Dr. Peter Gurau, math educator, and Edwin Lieberthal, author of *The Complete Book Of Fingermath*.

You've probably seen demonstrations on national TV, where primary graders came up with the right answers to sums faster than adults using pocket calculators. Or you've read about the Fingermath system in one of the many newspaper or magazine articles that have been appearing from coast to coast.

Now the technique has been refined and organized into a total instructional system—one that will supplement your regular curriculum and bring new enthusiasm to math studies.

Fingermath is fun to learn and easy to teach, because it's an active experience...like playing the piano, or baseball, or checkers. Your pupils can actually see and feel the calculations taking place.

By reducing arithmetical abstractions to concrete reality, Fingermath gives youngsters a better understanding of numbers, and of number relationships. Math anxiety is less of a factor because there's less dependence on memory.





# A Dynamic System for Teaching and Learning.

Fingermath is a complete instructional program in computation with whole numbers. It covers all the basic skills using 7 major teaching components:

- **The Complete Book Of Fingermath**
- **3 Pupil Editions**
- **3 Teacher Editions**

## THE COMPLETE BOOK OF FINGERMATH.\*

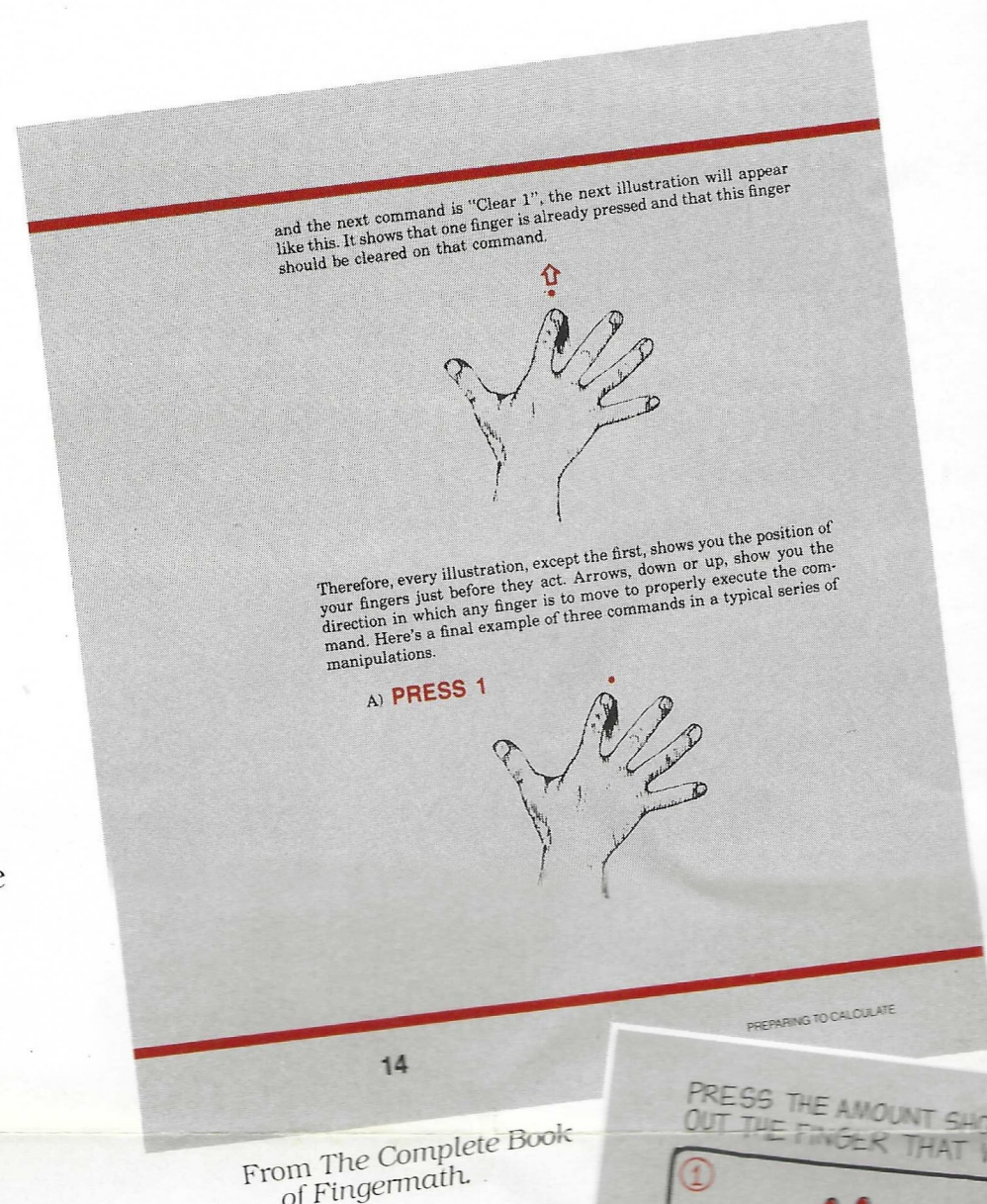
The best seller you've read about in newspapers and seen on TV—specially adapted for classroom use.

With *The Complete Book of Fingermath*, there's no need for training sessions or workshops. This comprehensive reference source tells you all you need to know to master the Fingermath method. It spells out the theory behind Fingermath, portrays the computational positions, explains each sequence of finger manipulations using over 1,000 two-color diagrams and illustrations—and provides many pages of reinforcement exercises. This self-instructional teacher text is a pre-requisite to the use of Fingermath school materials.

## PUPIL EDITIONS.

Three text-workbooks contain stimulating exercises that teach computational skills.

- BOOK 1 explains the basics of Fingermath...takes pupils through basic number facts in addition and subtraction...and begins double digit addition and subtraction.
- BOOK 2 reviews the Fingermath manipulations...continues through addition and subtraction with regrouping...and begins work on multiplication.
- BOOK 3 completes basic computation for the four fundamental operations and includes a variety of enrichment activities for the higher level student.



## A VALUABLE SUPPLEMENT.

Fingermath is compatible with any basal program. The exercises require no special timetable or equipment. You can combine them with your own lesson plans. And, it takes just 15 minutes a day!

## A TRUE SKILL BUILDER.

Fingermath develops basic computational skills far more rapidly and effectively than traditional programs for 3 reasons:

- 1) It visibly demonstrates the significance of numbers and numerical relationships.
- 2) It links counting to addition, and addition to other arithmetic operations.
- 3) It's motivational! Fingermath's tactile exercises are involving, enjoyable and fun!

*Comprehension improves*, because Fingermath exercises are more meaningful than just memorizing basic math facts.

*Accuracy is greater* because meaning complements memory. *Success comes rapidly*, and with it the confidence and self-esteem children need to learn and grow.

## SO MANY USES.

Any child who can count to 10 can learn Fingermath. You can teach it in classrooms or math labs to a wide variety of pupils.

- *Average pupils* use Fingermath to strengthen their basic computational skills.
- *Gifted children* find it intriguing to do complex computations without paper or pencil.
- *Slow learners* use Fingermath for remedial study or review.
- *Special education pupils*—including the learning disabled and the blind—respond to Fingermath's sensory techniques.

## Available Immediately.

- THE COMPLETE BOOK OF FINGERMATH: School Edition.**  
1979. 352 Pages. 037681-6. Schools \$11.55.
- FINGERMATH BOOK 1: TEACHER EDITION.**  
1979. 256 Pages. 025231-9. Schools \$6.60.
- FINGERMATH BOOK 1: PUPIL EDITION.**  
1979. 160 Pages. 025221-1. Schools \$3.30.
- FINGERMATH BOOK 2: TEACHER EDITION.**  
1980. 234 Pages. 025232-7. Schools \$6.60.
- FINGERMATH BOOK 2: PUPIL EDITION.**  
1980. 184 Pages. 025222-X. Schools \$3.30.
- FINGERMATH BOOK 3: TEACHER EDITION.**  
1980. 256 Pages. 025233-5. Schools \$6.60.
- FINGERMATH BOOK 3: PUPIL EDITION.**  
1980. 192 Pages. 025223-8. Schools \$3.30.

Teacher prices for orders placed other than by school PO  
Complete Bk Fingermath \$13.86  
All Teacher Editions 7.92  
All Pupil Editions 3.96

## TEACHER EDITIONS.

Three *Fingermath Teacher Editions* match Books 1, 2, and 3 of the *Pupil Edition*. Skill-by-skill, lesson-by-lesson, they provide a complete curriculum guide for the Fingermath program, including reproduction of all pages in the *Pupil Editions* for ready reference!

The *Teacher Editions* contain modularized units with learning objectives designed to fit any basal curriculum.

### BOOK 1

- Unit 1 Terminology
- Unit 2 Counting to and from 4
- Unit 3 Adding to 4
- Unit 4 The 4 to 5 Exchange and Numeration to 5
- Unit 5 Adding to 5
- Unit 6 Counting to 9
- Unit 7 Adding to 9
- Unit 8 Subtracting from Minuends to 5
- Unit 9 Subtracting from Minuends to 9
- Unit 10 Counting by 10s to 90: Left-hand Fingerpressing
- Unit 11 Counting to 19
- Unit 12 Using a Pencil while Fingercounting
- Unit 13 Adding to 14
- Unit 14 Adding to 19
- Unit 15 Counting by 2s and 10s
- Unit 16 Subtracting from 14
- Unit 17 Subtracting from 19
- Unit 18 Counting and Pressing to 99
- Unit 19 Adding and Subtracting to and from 99
- Unit 20 Counting by 3s and 5s

### BOOK 2

- Unit 1 Addition: Sums to 9
- Unit 2 Subtraction: Minuends to 9
- Unit 3 Pressing by Tens from 10 to 90:  
Addition: Sums to 19  
Subtraction: Minuends to 19
- Unit 4 Addition: Sums to 99:  
Subtraction: Minuends to 99
- Unit 5 Multiplication: 2s
- Unit 6 Addition With and Without Renaming
- Unit 7 Subtraction: One and Two-Digit Numbers, With and Without Renaming
- Unit 8 Multiplication: 5s
- Unit 9 Addition: 5s and 2s
- Unit 10 Subtraction: One-, Two-, and Three-Digit Numbers
- Unit 11 Multiplication: 6s
- Unit 12 Add 6s to Other Numbers, With Sums to 99
- Unit 13 Subtraction: One-, Two-, and Three-Digit Numbers
- Unit 14 Multiplication: 9s
- Unit 15 Addition: One-, Two-, and Three-Digit Numbers
- Unit 16 Subtraction: One-, Two-, and Three-Digit Numbers

### BOOK 3

- Unit 1 Review of Book 2 Skills
- Unit 2 Multiplication: 8s
- Unit 3 Addition Stressing 8s
- Unit 4 Subtraction Stressing 8s
- Unit 5 Multiplication: 4s
- Unit 6 Addition Stressing 4s
- Unit 7 Subtraction Stressing 4s
- Unit 8 Multiplication: 7s
- Unit 9 Addition and Subtraction Stressing 7s
- Unit 10 Multiplication: 3s
- Unit 11 Addition Reinforcement
- Unit 12 Subtraction Reinforcement
- Unit 13 Multi-Digit Multiplication
- Unit 14 Addition Review
- Unit 15 Subtraction Review
- Unit 16 Missing Addends, Missing Factors
- Unit 17 Division Without Remainders
- Unit 18 Division With Remainders
- Unit 19 Multiplication with Regrouping
- Unit 20 Multi-Digit Multiplication with Automatic Carryovers
- Unit 21 Addition and Subtraction Review
- Unit 22 Addition, Subtraction, Multiplication Review
- Unit 23 One-Line Multiplication of Two-Digit Numbers Review of ALL FINGERMATH SKILLS.

Each unit features imaginative lesson scripts utilizing the full range of classroom activities:

- Warmup drills
- Blackboard work
- Oral response activities
- Workbook exercises

The modules are carefully structured for daily use in 10-15 minute sessions. Each lesson builds on the lesson preceding it, yet the sequence is flexible enough to fit your own schedule.

Working in tandem, *The Complete Book Of Fingermath*, the *Pupil Editions* and *Teacher Editions* provide a sequenced system of instruction that may be used in various combinations throughout the elementary grades. Here are recommended Fingermath programs you can start in your school.

GRADES						
1	2	3	4	5	6	
Start Fingermath grade 1: Three year program Bk 1      Bk 2      Bk 3						
	Start Fingermath grade 2: Three year program Bk 2      Bk 3					
		Start grade 3: Two year program Bk 2      Bk 3				
			Start grade 4: Two year program Bk 2      Bk 3			
				Start grade 5: Two year program Bk 2      Bk 3		
					Start grade 6: One year program Bk 2 Bk 3	

## Fingermath Earns High Marks... IN EVALUATION PROGRAMS.

The Texas State Department of Education is now conducting an extensive pilot program involving 300 teachers and nearly 6,000 pupils.

"The Fingermath materials which you have put together have provided us with a well structured program. We are using these materials in all the pilot schools across the state, and I am constantly getting requests for materials from other schools not participating in the pilot project."

Robbie Pickelman, Ph.D.  
Consultant In Instructional Services  
Education Service Center, Region 10  
Richardson, Texas

The University of Oregon is using state grants to evaluate the effectiveness of Fingermath with both regular and handicapped children over a 3-year period.

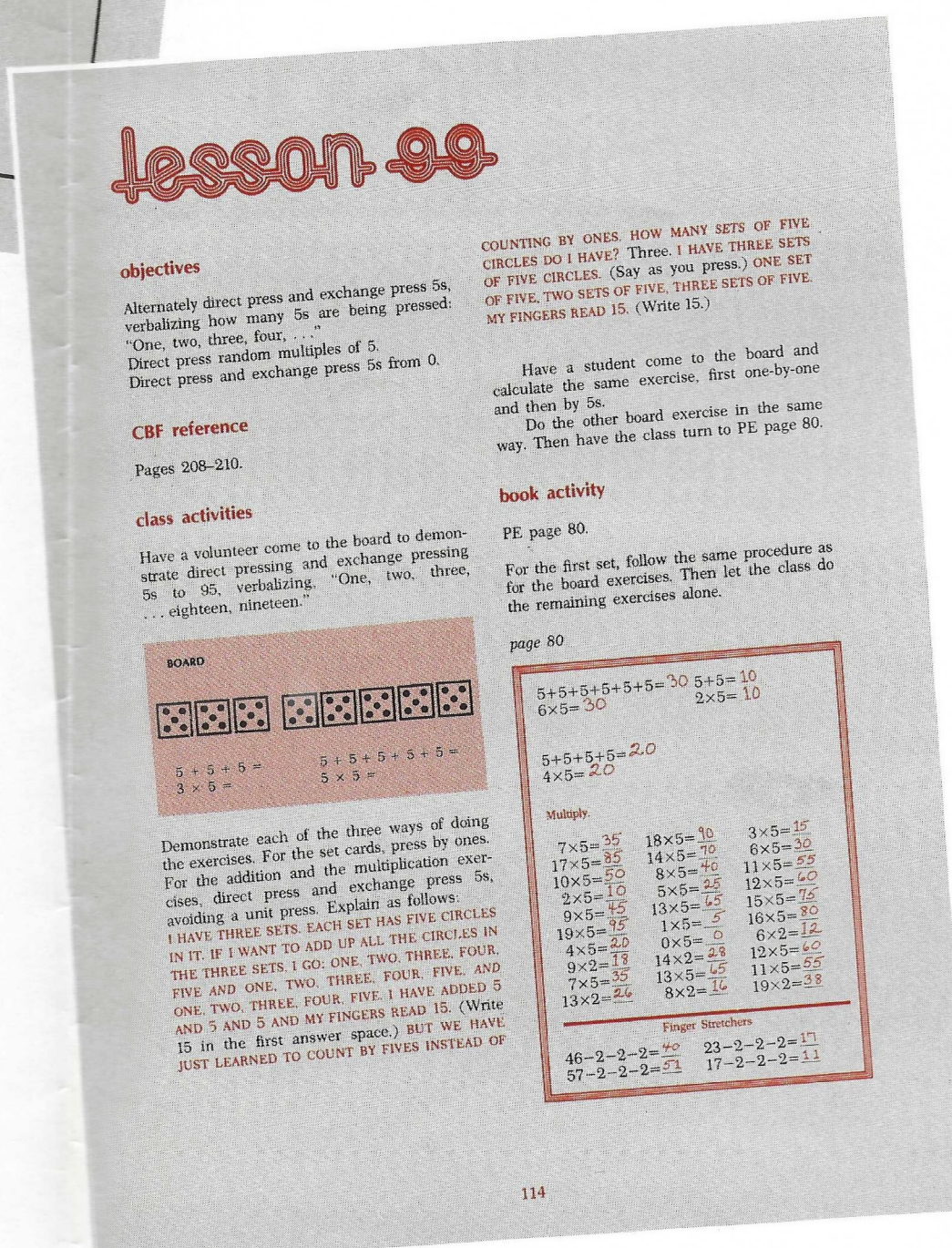
"In mathematics learning, sensory input is imperative. For the child who is having difficulty with arithmetic, tactile manipulation is crucial. Then what better way of learning than with the use of one's own hands? The pressing and releasing of fingers, as in Fingermath, seems to facilitate a smooth transition between sensory input and its mental interpretation...As a supplement to current pedagogical techniques, Fingermath is highly recommendable."

William E. Lamon, Ph.D.  
Director, Psychological Research  
Laboratory for Mathematics  
University of Oregon  
Eugene, Oregon

## FROM EDUCATORS.

"Fingermath has provided me with an exciting new way of reinforcing the basic math concepts and computational skills that I've been teaching for ten years—but most important, Fingermath has helped my students increase their self-confidence with numbers."

Pam Boldrin  
Title I Math Teacher  
Cooper Elementary School  
Seattle, Washington



From Book 2: Teacher Edition.

\*FINGERMATH is McGraw-Hill's Trademark for specific instructional materials and methods.

**WORKSHOPS** Schools adopting sufficient quantities of Fingermath books can arrange for teacher in-service training at no additional charge.

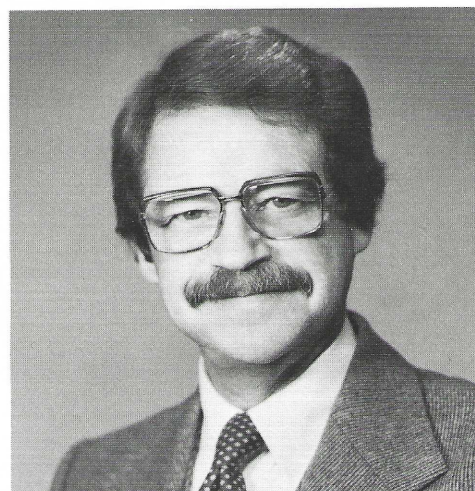


# The Fingermath<sup>TM</sup> Author Team.



## PETER GURAU, Ph.D.

Dr. Gurau is co-author of the *Fingermath Teacher Editions* and *Pupil Editions*. He has an extensive background in mathematics and education, and is currently Professor of Mathematics Education at Springfield College, Springfield, Massachusetts.



## EDWIN M. LIEBERTHAL

Author of *The Complete Book Of Fingermath*, and writer/host of the popular Fingermath programs on NBC-TV's Knowledge Series, Mr. Lieberthal is currently Executive Director of Fingermath International.

### "I PLAN TO USE FINGERMATH FROM NOW ON . . ."

"I have used Fingermath with my first-grade class this year as a supplement to the regular math text and materials. I've been delighted with the results. The most important contribution has been an increase in the children's understanding of the basic concepts of first-grade math.

"After I have introduced a new concept by using concrete materials, I reinforce it with Fingermath drill on the same concept. When concrete materials slow them up, but they still need something to give them a visual or motor or kinesthetic aid, the children can use Fingermath.

"I find children who are not Math Whizzes getting correct answers for  $6 + 8 + 5$  or  $12 + 6$ , using Fingermath. The gym teacher told us that she found first graders using Fingermath to add up cumulative scores

in games and getting the correct answers often before second or third graders who had not been taught Fingermath.

"I certainly plan to use Fingermath from now on in teaching any elementary grade.

"I can't end without mentioning that the children love it. It's not just a novelty that wears off; they really enjoy the 10 to 15 minutes a day that we devote to Fingermath.

"During regular math time, we mention it and use it in demonstrations, but no child is forced to use it; it is one of the alternatives, one that many of them use often. I love Fingermath."

Ellen M. Donoghue  
Teacher, Grade 1  
Longmeadow, Massachusetts



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